

ABSTRACT

The subject of this patent is a system to generate RF frequency hopped signals that can be used to test radio receivers over the range of their signal specifications. The hop sequence and symbols in the signal is decoded from signals transmitted by the same or different radio of the same specification. The system can set various signal parameters to any prescribed value. These parameters include carrier frequency error, bit rate error, rise and fall times, amplitude ripple and roll off, modulation depth, nonlinearities, burst duration, burst start time and burst interval. Signal interference can be added to the signal including tones, other signals, noise and other signals of the same as the test radio. Similarly other communications equipment can be tested by the combination of receiving and demodulating a transmitted and regenerating the signal with the same symbols with specified signal parameters.